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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,923	03/24/2004	Tatsuaki Osafune	16869P-108200US	8044

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EXAMINER	
SAMS, MATTHEW C	

ART UNIT	PAPER NUMBER
2643	

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/808,923	OSAFUNE ET AL.	
	Examiner	Art Unit	
	Matthew C. Sams	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *3/24/2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 March 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement filed on 3/24/2004 has been considered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 & 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "and/or" renders the claims indefinite because the examiner cannot determine which limitations are essential to the invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Waters et al. (US-2003/0008659 hereafter, Waters).

Regarding claim 1, Waters teaches a position-information managing method for managing positions of a plurality of nodes connected to a network (Page 1 [0004-0011]), permitting calculation of position information about any one of the nodes not furnished with any own-position detection unit by use of network routing information for allowing the nodes to communicate with one another, position information about any one of the nodes which as an own-position detection unit, or position information about any one of the nodes which has a predetermined position. (Page 2 [0024] and Page 5 [0080])

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waters in view of Okuda (US 2003/0078054).

Regarding claim 2, Waters teaches a position-information managing method according to claim 1 that includes keeping a log of locations for surrounding nodes on a grid (Page 5 [0082]), determining position information about a node having own-position detection unit, the position information about the node with the predetermined position, and the calculated information (Page 2 [0024] and Page 5 [0080]), but differs from the claimed invention by not mentioning displaying the positions of the nodes. However, Okuda teaches a mobile device that sends its own location to another mobile device, which displays the location of both mobile devices on a map. (Page 2 and 3 [0038]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to incorporate the displaying of positions of Okuda with the position-information managing method of Waters. One of ordinary skill in the art would have been motivated to do this since having a visual indication of relative locations makes finding each other's location easier and can show obstacles in the terrain between the relative locations.

Regarding claim 3, Waters in view of Okuda teaches the network routing information includes distance information about logical distances between each of the plurality of nodes and other nodes and wherein the method permits calculation of the position information about the node with no own-position detection unit in accordance with the logical distance information. (Waters Page 2 [0024], Page 5 [0080] and Okuda Pages 2-3 [0038-0044]) Waters in view of Okuda teaches a map that shows the relative position of the nodes and includes latitude, longitude and altitude information in

transmissions, which is the information required for finding the distance between two nodes. (Okuda Page 3 [0040-0044])

Regarding claim 4, Waters in view of Okuda teaches the distance information can be measured in the number of hops. (Waters Page 2 [0024])

Regarding claim 5, Waters in view of Okuda teaches the position information about the node with no own-position detection unit is calculated using as a coefficient the distance over which a wireless communications unit of the node in question can communicate directly with any other node. (Waters Page 2 [0024])

Regarding claim 6, Waters in view of Okuda teaches displaying the positions of nodes in communication with each other by connecting lines between the devices. (Waters Fig. 1B, Fig. 6 and Fig. 7)

9. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waters in view of Suzuki et al. (US 2002/0094823 hereafter, Suzuki).

Regarding claim 7, Waters teaches a network system having a plurality of nodes connected via a network (Waters Fig. 1B [10, 12, 14 & 16]), wherein the plurality of nodes constituted at least by a node having an own-position detection unit or a node having a predetermined position and by a node with no own-position detection unit. (Waters Page 2 [0024] and Page 5 [0080]) Waters teaches the calculating position information about the node with no own-position detection unit by use of network routing information for allowing the plurality of nodes to communicate with each other, position information about the node having the own-position detection unit, or position information about the node having the predetermined position. (Waters Page 2 [0024],

Page 3 [0041] and Page 5 [0080]) Waters teaches storing activity logs of connections at a central computer (Page 1 [0011]), but differs from the claimed invention by not mentioning a connection-configuration display server used for graphically indicating positions. However, Suzuki teaches a radio communication system that detects locations and has a central management device that displays locations on a map and shows lines indicating connected states among the node devices. (Page 5 [0055]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to incorporate the management display device of Suzuki in the network system of Waters. One of ordinary skill in the art would have been motivated to do this since having a visual indication of relative locations makes finding each other's location easier, can show obstacles in the terrain between the relative locations and can show defective connections between the nodes. (Page 5 [0055])

Regarding claim 8, Waters in view of Suzuki teaches a connection-configuration display server that displays the positions of the nodes and indicates lines connecting any two nodes that can directly communicate with each other. (Suzuki Page 5 [0055])

Regarding claim 9, Waters in view of Suzuki teaches the plurality of nodes transmit network routing information owned by the node in question to the connection-configuration display server and wherein the connection-configuration display server receives the network routing information from the plurality of nodes. (Suzuki Page 5 [0055])

Regarding claim 10, Waters in view of Suzuki teaches any of the plurality of nodes which has the own-position detection unit transmits the position information

acquired by the unit to the connection-configuration display server and wherein the connection-configuration display server receives the network routing information and the acquired position information. (Waters Page 2 [0024], Page 3 [0041] and Page 5 [0080] and Suzuki Page 5 [0055])

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Sams whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (571)272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MCS
12/30/2005

DUC NGUYEN
PRIMARY EXAMINER